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(19) **United States**(12) **Patent Application Publication**  
**MERZ et al.**(10) **Pub. No.: US 2015/0060110 A1**(43) **Pub. Date: Mar. 5, 2015**(54) **METHODS FOR SHIELDING ELECTRONIC COMPONENTS FROM MOISTURE****Publication Classification**(71) Applicant: **Apple Inc.**, Cupertino, CA (US)(72) Inventors: **Nicholas G. MERZ**, San Francisco, CA (US); **Scott A. MYERS**, Saratoga, CA (US); **Gregory N. STEPHENS**, Sunnyvale, CA (US); **Joseph C. POOLE**, San Francisco, CA (US)(51) **Int. Cl.****H05K 1/02** (2006.01)**H05K 3/28** (2006.01)**C23C 16/50** (2006.01)(52) **U.S. Cl.****CPC** ..... **H05K 1/0216** (2013.01); **C23C 16/50**(2013.01); **H05K 3/282** (2013.01); **H05K****2201/0715** (2013.01)**USPC** ..... **174/251**; 427/96.4; 427/569(73) Assignee: **Apple Inc.**, Cupertino, CA (US)(21) Appl. No.: **14/230,639**(22) Filed: **Mar. 31, 2014****Related U.S. Application Data**

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**ABSTRACT**

Methods for applying a hydrophobic coating to various components within a computing device are disclosed. More specifically, a hydrophobic coating can be applied by a plasma assisted chemical vapor deposition (PACVD) process to a fully assembled circuit board. Frequently, a fully assembled circuit board can have various components such as electromagnetic interference (EMI) shields which cover water sensitive electronics. A method is disclosed for perforating portions of the EMI shields that overlay the water sensitive electronics. Methods of sealing board to board connectors are also disclosed. In one embodiment solder leads of the board to board connectors can be covered by a silicone seal.

